

Appl. No. 10/627,427
Amend Dated: May 24, 2005
Reply to Office Action of March 25, 2005
Docket No. 6273US

REMARKS

CLAIM STATUS AND AMENDMENT

With this Amendment Response, claims 1-13, 17-22 and 27-30 are pending. Claims 1, 11, 12, 27, 29 and 30 have been amended.

Applicants gratefully acknowledge indication of allowance of claims 11, 12, 17 and 21.

Claims 1, 27, 29 and 30 have been amended to recite that the oil or fat to be used in the food product is mixed with a hydrated cyclodextrin in an amount effective to increase the viscosity of the fat or oil. Literal antecedent basis for this amendment may be found in paragraphs 0036 and figure 3, 0013 and 0027 of the specification.

Claim 11 has been amended to enhance readability by using the more conventional "comprises" rather than the awkward phrase "is comprised of." Likewise, claim 12 has been amended to provide the grammatically correct singular form of "glucan." These amendments do not change the scope of the claims, and therefore do not introduce new matter or new issues.

It is respectfully submitted that these amendments simplify the issues in the present application and places the present application in immediate condition for allowance. Additionally, the present amendment clearly presents no new matter. Entry and favorable consideration of the presently pending claims is therefore earnestly solicited.

REJECTIONS UNDER 35 U.S.C. § 103(A)

Claims 1-3, 6-10, 13, 18-20, 22 and 27-30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Qi in view of Bailey's Industrial Oil and Fat Products (authored by Swern, hereinafter "Bailey's").

The present invention relates to a fat containing food product having reduced trans fat levels. As noted in the specification, trans fats have become a conventional component of food products through the hydrogenation process that has traditionally been used to increase the solid fat content of fat, thereby providing a more viscous or thickened fat that carries out important mixing and mouth feel properties, as distinguished from a nutritive additive that provides, for example, desirable healthful chemicals such as omega-3 fatty acids. See paragraph 0008 of the specification.

Appl. No. 10/627,427
Amend Dated: May 24, 2005
Reply to Office Action of March 25, 2005
Docket No. 6273US

Surprisingly, it has been found that the creation of cyclodextrin-fat complexes provide more viscous fat, without creation of undesirable trans fats, thereby making it possible to provide desirable fat containing foods with substantial reduction of trans fat levels. See paragraph 0013 of the specification.

The claims have been amended to specify that the oil or fat to be used in the food product is mixed with a hydrated cyclodextrin in an amount effective to effective to increase the viscosity of the fat or oil. This amendment clearly establishes that the resulting complex results in a fluid fat composition, rather than a dry composition, because viscosity is defined as a measure of internal resistance when a fluid moves against itself. See, for example, the Technical Data Sheet regarding Viscosity and Hardness by Emerson and Cumming, and also the Merriam-Webster dictionary.

Qi discloses the creation of a dry composition for delivery of fish oils as a nutritive component in dry food compositions. In Qi, the fish oil is encapsulated in a starch based matrix that contains little or no cyclodextrin. See column 1, line 66 to column 2, line 2. This dry encapsulated oil product is prepared by mixing the oil and the starch matrix in an emulsion, and drying the emulsion to form a dry ingredient product. See column 2, line 49 to column 3, line 4. Thus, Qi does not disclose a fluid fat, and fails to disclose, teach or suggest the mixing of cyclodextrin with oil or fat in an amount effective to increase the viscosity of the fat or oil as required by the claims as amended, because the resultant dry Qi composition does not have a viscosity.

It is respectfully submitted that Bailey's fails to bridge the gap between Qi and the present claims.

Bailey's is cited for the purpose of showing that natural fats do not contain trans fats. Bailey's, however, provides no teaching, motivation, or suggestion to provide a more viscous fat of any kind by using cyclodextrin, and to use such a more viscous fat in a fat containing product having reduced trans fat levels.

Claims 4-5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Qi in view of Bailey's, and further in view of Takada.

Takada is cited for the purpose of showing the use of an enzyme to form cyclodextrin. It is respectfully submitted that Takada also does not bridge the gap between Qi in combination with Bailey's and the present claims. Takada provides no teaching, motivation, or suggestion to provide a more viscous fat of any kind by using

Appl. No. 10/627,427
Amend Dated: May 24, 2005
Reply to Office Action of March 25, 2005
Docket No. 6273US

cyclodextrin, and to use such a viscous fat in a fat containing product having reduced trans fat levels.

Claim 1 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Roderbourg in view of Bailey's.

Roderbourg discloses a process for removing cholesterol and free fatty acids from an animal fat material by complexing these components with cyclodextrin, and then separating the complexes from the fat. The resulting Roderbourg fat product thus does not contain cyclodextrin as required in the present claims.

It is respectfully submitted that Bailey's fails to bridge the gap between Roderbourg and the present claims. As above, Bailey's is cited for the purpose of showing that natural fats do not contain trans fats. Bailey's, however, provides no teaching, motivation, or suggestion to provide a more viscous fat of any kind by using cyclodextrin, and to use such a more viscous fat in a fat containing product having reduced trans fat levels.

REJECTION UNDER 35 U.S.C. § 102(b)

Claims 1-3, 6, 8, 10, 13-16, 18-20, 22 and 27-29 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Saito as further evidenced by Bailey's.

Saito discloses a fat-reducing food containing alpha cyclodextrin and gamma-linolenic acid. The alpha cyclodextrin is disclosed in the examples to be added to evening primrose oil containing gamma-linolenic acid, which is then processed into granules or pressed into tablet form. Thus, Saito does not contemplate preparation of a fluid oil or fat which would have a viscosity, but rather describes only preparation of a dry granule or tablet as a food supplement. Saito therefore does not anticipate the present claims as amended.

Appl. No. 10/627,427
Amend Dated: May 24, 2005
Reply to Office Action of March 25, 2005
Docket No. 6273US

CONCLUSION

It is respectfully submitted that the cited references, alone or in combination, fail to teach or suggest the subject matter of the present claims. In view of the foregoing, Applicants respectfully request that the rejection of claims be withdrawn and that the application be allowed.

The Examiner is invited to contact the undersigned, at the Examiner's convenience, should the Examiner have any questions regarding this communication or the present patent application.

Date: May 24, 2005

By: 

Respectfully Submitted,
PLANK ET AL

Dale A. Bjorkman, Reg. No. 33,084
Phone: 651-275-9811
Fax: 651-351-2954

18697